

Notice of Allowability

Application No.

10/551,184

Applicant(s)

NILSSON, GORGEN

Examiner

Jurie Yun

Art Unit

2882

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 11/30/07.
2. ☒ The allowed claim(s) is/are 1-12,14,15 and 17-26.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 11/30/07
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


Jurie Yun

DETAILED ACTION

1. The amendment filed 11/30/07 has been entered.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with John R. Lastova on 1/3/08.

The application has been amended as follows:

In claim 4, line 2, delete "patent" and replace with --patient--

In claim 7, line 10, delete "(" and replace with --,--

In claim 7, line 10, delete ")" and replace with --,--

In claim 8, line 3, delete both instances of "*" and replace each with --+--

In claim 8, line 9, delete "(" and replace with --,--

In claim 8, line 9, delete ")" and replace with --,--

In claim 14, line 3, delete "in"

In claim 14, line 6, after "wherein" insert --each of--

In claim 14, line 6, delete "detectors" and replace with --detector planes--

In claim 15, line 1, after "wherein" insert --each of--

In claim 15, line 2, delete "detectors have" and replace with --detector planes
has--

In claim 23, line 8, delete "(" and replace with --,--

In claim 23, line 8, delete ")" and replace with --,--

In claim 24, line 3, delete both instances of "*" and replace each with --+--

In claim 24, line 8, delete "(" and replace with --,--

In claim 24, line 8, delete ")" and replace with --,--

Allowable Subject Matter

3. Claims 1-12, 14, 15, and 17-26 are allowed.

The following is an examiner's statement of reasons for allowance:

Prior art fails to disclose a method of measuring dose distribution in a phantom for radiation therapy treatment verification, wherein at least two detector planes are arranged in said phantom in a non-parallel manner, each plane being provided with a plurality of diode detectors, wherein said phantom is irradiated using a patient specific treatment, comprising dividing the measurements in time-intervals, each time-interval having maximum length of approximately 100 msec, and using said information in the treatment verification, as claimed in claim 1. Claims 2-10, 14, 15, 17, and 18 are allowed due to their dependency on claim 1.

Prior art fails to disclose a method of measuring dose distribution in a phantom for radiation therapy treatment verification, wherein detector planes are arranged in said phantom, each plane being provided with a plurality of diode detectors, wherein said phantom is irradiated using a patient specific treatment, comprising dividing the measurements in time-intervals, each time-interval having a maximum length of approximately 100 msec, synchronizing the measurements with a respiratory cycle of a

patient for which the patient specific treatment is intended, determining the dose delivered in the various phases of the respiratory cycle, and using said information in the treatment verification, as claimed in claim 11. Claim 12 is allowed due to its dependency on claim 11.

Prior art fails to disclose an apparatus for measuring dose distribution in a phantom for radiation therapy treatment verification where said phantom is irradiated using a patient specific treatment, comprising at least two detector planes arranged in said phantom in a non-parallel manner, each plane being provided with a plurality of diode detectors, and electronic circuitry configured to divide the measurements in time-intervals, each time-interval having maximum length of approximately 100 msec, and use said information in the treatment verification, as claimed in claim 19. Claims 20-25 are allowed due to their dependency on claim 19.

Prior art fails to disclose an apparatus for measuring dose distribution in a phantom for radiation therapy treatment verification, wherein detector planes are arranged in said phantom, each plane being provided with a plurality of diode detectors, wherein said phantom is irradiated using a patient specific treatment, comprising means for dividing the measurements in time-intervals, each time-interval having a maximum length of approximately 100 msec, means for synchronizing the measurements with a respiratory cycle of a patient for which the patient specific treatment is intended, means for determining the dose delivered in the various phases of the respiratory cycle, and means for using said information in the treatment verification, as claimed in claim 26.

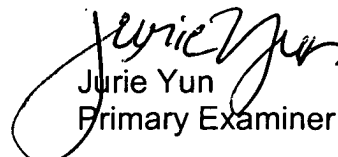
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jurie Yun whose telephone number is 571 272-2497. The examiner can normally be reached on Monday-Friday 8:30-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on 571 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Jurie Yun
Primary Examiner

Application/Control Number:
10/551,184
Art Unit: 2882

Page 6

Art Unit 2882

January 3, 2008